

WHAT IS CLAIMED IS:

- 1                   1.       A method of committing a transaction to a database, the method  
2 comprising:  
3                   initiating a database transaction;  
4                   creating an electronic record that includes transaction data from the  
5 database transaction;  
6                   executing a rule associated with the record to determine whether an  
7 electronic signature is required to connote review and/or approval of the electronic  
8 record, wherein if execution of the rule results in a determination that an electronic  
9 signature is required, requesting the electronic signature prior to committing the  
10 transaction to the database.
- 1                   2.       The method of claim 1 wherein the electronic record comprises  
2 data generated from multiple tables of the database.
- 1                   3.       The method of claim 1 wherein the electronic record is stored in  
2 a common repository of electronic records that provides an audit trail that cannot be  
3 altered or disabled by users of the database.
- 1                   4.       The method of claim 1 wherein the electronic record is stored as  
2 unstructured data in a character large object (CLOB) format.
- 1                   5.       The method of claim 4 wherein the unstructured data comprises a  
2 well-formed XML document stored within a column of a database table.
- 1                   6.       The method of claim 5 wherein XML fields of the unstructured  
2 data are filled with the transaction data based on a predefined mapping of a data type  
3 definition to multiple data sources.
- 1                   7.       The method of claim 1 further comprising the step of, if  
2 execution of the rule results in a determination that an electronic signature is required,  
3 displaying at least some of the transaction data in the electronic record on a computer  
4 display and requesting the electronic signature.
- 1                   8.       The method of claim 7 wherein the transaction data in the  
2 electronic record is displayed according to a predefined layout set forth in an XSL style

3 sheet and wherein the unstructured data further comprises a copy of the electronic  
4 record as displayed in a second column of the database table.

1 9. The method of claim 1 further comprising obtaining and  
2 verifying the electronic signature, and thereafter, committing the database transaction to  
3 the database.

1 10. The method of claim 1 wherein the rule requires a plurality of  
2 different electronic signatures and wherein, if execution of the rule results in a  
3 determination that a plurality of electronic signatures are required, requesting the  
4 plurality of electronic signatures prior to committing the data to the database.

5 11. The method of claim 9 wherein, if the electronic signature is  
6 rejected or otherwise cannot be obtained, the transaction is rolled-back and not  
7 committed to the database.

1 12. A computer system that manages electronic records stored in a  
2 database, the computer system comprising:  
3 a processor;  
4 a database; and  
5 a computer-readable memory coupled to the processor, the computer-  
6 readable memory configured to store a computer program;  
7 wherein the processor is operative with the computer program to:  
8 (i) initiate a database transaction;  
9 (ii) create an electronic record that includes transaction data from the  
10 database transaction; and  
11 execute a rule associated with the record to determine whether an  
12 electronic signature is required to connote review and/or approval of the electronic  
13 record, wherein if execution of the rule results in a determination that an electronic  
14 signature is required, requesting the electronic signature prior to committing the  
15 transaction to the database.

1 13. The computer system of claim 12 wherein the electronic record  
2 comprises data generated from multiple tables of the database.

1                   14.     The computer system of claim 12 wherein the electronic record  
2 is stored in a common repository of electronic records that provides an audit trail that  
3 cannot be altered or disabled by users of the system.

1                   15.     The computer system of claim 12 wherein the electronic record  
2 comprises unstructured data in a character large object (CLOB) format.

1                   16.     The computer system of claim 15 wherein the unstructured data  
2 comprises a well-formed XML document stored within a column of a table stored in the  
3 database

4                   17.     The computer system of claim 16 wherein fields of the electronic  
5 record are filled with the transaction data based on a predefined mapping of a data type  
6 definition to multiple data sources.

1                   18.     The computer system of claim 12 further comprising obtaining  
2 and verifying the electronic signature, and thereafter, committing the database  
3 transaction to the database.

1                   19.     A computer program stored on a computer-readable storage  
2 medium for managing electronic records stored in a database, the computer program  
3 comprising:  
4                   code for initiating a database transaction;  
5                   code for creating an electronic record that includes transaction data from  
6 the database transaction; and  
7                   code for executing a rule associated with the record to determine  
8 whether an electronic signature is required to connote review and/or approval of the  
9 electronic record, wherein if execution of the rule results in a determination that an  
10 electronic signature is required, requesting the electronic signature prior to committing  
11 the transaction to the database.

1                   20.     The computer program of claim 19 wherein the code for creating  
2 an electronic record creates electronic records in response to the occurrence of a  
3 predefined event.

1                   21.     The computer program of claim 19 wherein the electronic record  
2 is stored in a common repository of electronic records that provides an audit trail that  
3 cannot be altered or disabled by users of the system.

1                   22.     The computer program of claim 21 wherein the electronic record  
2 comprises unstructured data in a character large object (CLOB) format.

1                   23.     The computer program of claim 22 wherein the unstructured data  
2 comprises a well-formed XML document stored within a column of a table stored in the  
3 database.

1                   24.     The computer program of claim 23 wherein fields of the  
2 electronic record are filled with the transaction data based on a predefined mapping of a  
3 DTD to multiple data sources.

1                   25.     The computer program of claim 19 further comprising code for  
2 obtaining and verifying the electronic signature, and thereafter, committing the  
3 electronic record to the database.

1                   26.     A method of committing a transaction to a database, the method  
2 comprising:  
3                   automatically creating an electronic record including transaction data  
4 associated with the transaction in response to the occurrence of a predetermined event,  
5 wherein the electronic record comprises the transaction data stored as a well-formed  
6 XML document in a character large-object (CLOB) format of a column of a database  
7 table;  
8                   storing the electronic record in a common repository of electronic  
9 records that provides an audit trail that cannot be altered or deleted by users of the  
10 system;  
11                  executing a rule associated with the electronic record to determine  
12 whether an electronic signature is required to connote review and/or approval of the  
13 electronic record; and  
14                  if execution of the rule results in a determination that an electronic  
15 signature is required, (i) displaying the transaction data in the electronic record  
16 according to a predefined layout set forth in an XSL style sheet associated with the

- 17 electronic record and storing a copy of the transaction data as displayed in a character
- 18 large-object (CLOB) format of a second column of the database table and (ii)
- 19 requesting, obtaining and verifying the electronic signature prior to committing the
- 20 transaction into a database.